AUSTRALIAN DOLICHOPODIDAE (DIPTERA).

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This catalogue is published in order to supply a demand for an introduction to the described members of Australian Dolichopodidae, which family has been largely neglected in the Commonwealth, because of the lack of a comprehensive scheme whereby the species may be identified. In his work on the Indo-Australian forms, Becker incorporated but few of those previously described from Australia, but most of them are listed, and he completely ignored White's work on the Tasmanian species, which are not easily brought into line with the system used by Becker. Many of the problems and perplexities that confront one when attempting to arrange species and genera proposed by prior authors into a definite scheme of classification have not been solved, owing to the absence of several described species in the collection before me. This collection contains the largest number of Australian species yet brought together, nevertheless five of the genera are missing, or perhaps they are not recognised owing to faulty definitions, for some are defined without regard to affinities, and the characters upon which they are based may be specific, not generic. Also there is room for considerable improvement in forming the genera amongst the Chrysosomatinae, where characters used lead to an artificial grouping, and some natural groups are swamped in the medley of genera thus diagnosed.

I have felt it incumbent upon me to simplify the key to sub-families and genera as much as possible, so no attempt has been made to draw up a key that will be applicable to all forms before me. Although the key provided will be found to cover only the majority of forms, exceptions may be disregarded despite their comparative frequency, because once a small collection representative of all sub-families has been got together, it will be found that these exceptions can be placed without difficulty, due to the fact that members of each sub-family have general features in common, giving them a somewhat characteristic appearance.

In the keys, the genera and species recognised in the collection before me are marked by an asterick (*).

Key to Sub-families and Genera of the Dolichopodidae.

1.	Upper median vein forked.	Chrysosomatinae.	2.
	Upper median vein simple.		5.
2.	Arista placed quite apically.	* *Chrysosoma.*	
	Arista placed sub-apically, dorsally or basally.		3.
3.	Arista issuing from (at most) a very small tubercle.		4.
	Tubercle from which the arista arises is, in length, about four times that of its width.	*Megistostylus.*	
4.	Scutellum with normally two marginal bristles; others, if present, weak and white.	* *Sciapus.*	
	Scutellum with four marginal bristles. ..	* *Condylostylus.*	
5.	Acrostichal bristles absent.	Campsicneminae. * *Sympycnus.*	
	Acrostichal bristles present.		6.
6.	Second segment of antennae with a thumb-like prolongation that reaches on to the third. Arista placed apically.	Raphinae. *Syntormon.*	

Second segment of antennae normal, without such a prolongation. .. .. 7.

7. Acrostichal bristles uniserial, or mainly so. Hydrophorinae. 8.

Acrostichal bristles biserial for their complete length. (Exception may be found in Medeterinae, but in such a case the flattened area on the thorax would indicate that family) .. .. 10.

8. Antennae with segment 3 short in both sexes. Anterior femora with two rows of bristles below. .. .. * *Hydrophorus*.

Antennae with the third segment elongate at least in the male. .. .. 9.

9. Upper median vein straight, more or less parallel to the radius. .. .. *Liparomyia*.

Upper median vein bent, not parallel to the radius. .. .. *Paraliptus*.

10. Postocular area with only a single row of bristles, not hairy. .. .. 12.

Postocular area with numerous hairs. .. .. Diaphorinae. 11.

11. Arista placed sub-apically. .. .. *Chrysotus*..

Arista distinctly placed dorsally. .. .. * *Diaphorus*.

12. Area of thorax above scutellum flat, or even slightly concave. .. .. 14.

Area of thorax above scutellum normal, convex. .. .. Dolichopodidae. 13.

13. Upper median vein bending upwards, touching or nearly touching the radial. .. .. * *Paraclius*.

Upper median vein not reaching the radial. * *Dolichopus*.

14. Abdomen short, conical; very small species. Medeterinae. 15.

Abdomen long; larger species. .. .. Neurogoninae. 16.

15. Anal vein wanting. .. .. * *Thypticus*.

Anal vein present. .. .. * *Medetera*.

16. Upper median vein strongly bending upwards and at its tip almost reaching the radial. .. .. * *Neurongonia*.

Upper median vein but slightly bent, at apex separated from the radial. .. .. * *Archynomyia*.

Sub-family Chrysosomatinae.

The described Australian species of this sub-family are readily recognised by the branched or forked upper median vein, that is M_1 and M_2 branch from each other beyond the median cell, whereas in all the other sub-families there is only one vein present in this region of the wing, although it is often strongly curved as if the vein M_2 had disappeared. The genus *Mesorhaga* is represented in Australia, though not described from there; this genus is without M_2, and so the character given above is not applicable in this case. The described forms have been placed under four generic names, and these divisions are recognised as follows:—

Chrysosoma has the arista placed apically—that is, at the extreme apex of the third segment of the antennae, whereas in all the others the arista is placed basally, dorsally or sub-apically.

Megistostylus has the arista arising from a very long dorsal tubercle, the length being about four times the breadth; this genus is limited to one extra limital species recorded from Queensland.

In the other two genera the tubercle from which the arista arises is very short or apparently absent, but in one, *Sciapus*, the scutellum has but two marginal bristles, whereas in *Condylostylus* there are four; care has to be taken, however, as *Sciapus* may have an additional pair of short stiff hairs of a light colour, whilst the second pair of bristles on *Condylostylus* may be short, but black.

It would seem that these characters swamp such homogeneous natural groups found amongst the Australian forms, and so they cannot be considered satisfactory from this aspect alone.

Genus CHRYSOSOMA Guerin.

Chrysosoma Guerin, Voy. Coq. Zool., Atlas, Tab. xx., 25, vii., 1831.—Becker, Cap. Zool., i. (4), p. 114, 1922 (which see for further synonymy).—*Heterospilus* Bigot, Ann. Soc. Ent. France (3), iii., 224, 1859.

Key to the Species of Chrysosoma; adapted from Becker.

1. Femora yellow or mostly so. .. .. 2.
   Femora mainly black. Antennae black, knees and tibiae yellow, intermediate and posterior femora with one or two short bristles at base, otherwise legs very bare. Wings hyaline, the cross-vein closing the median cell sinuous. 7 mm. long. .. *cingulipes* Walker.
2. Antennae wholly yellow. Thorax black, dull grey dusted, frons similar, wing surface colourless except for a brown spot at both cross-veins (i.e., at base of M1 and at vein closing the median cell); legs and all coxae yellow; first four abdominal segments of male yellow with metallic coloured black spots, in female abdomen almost wholly without yellow spots; hypopygium yellow with long attachments. 6.5—8 mm. .. .. *volucre* Becker.
   Antennae black or black-brown. .. .. 3.
3. Wings clear, at most markings very faintly indicated. Frons white dusted, abdomen at base barely yellow, tarsi brown only at their apices, only the anterior coxae yellow, the others dark. Wings rather greyish, occasionally faintly marked at the anterior border; M1 somewhat recurrent at base, the lower cross-vein strongly sinuous. 7 mm. long. .. .. *chrysurgum* Schiner.
   Wings conspicuously marked. Abdomen with broad dull black bands on anterior edge of segments; third antennal segment almost coneform, long, three times as long as broad; apical half of anterior femora and four-fifths of hind femora and all tarsi black; wings black-brown on anterior border and a median interrupted stripe, anterior margin very delicately ciliated. 8 mm. long. .. .. *interruptum* Becker.

CHRYSOSOMA VOLUCRE Becker.

Chrysosoma volucre Becker, Cap. Zool., i. (4), 1922, 142; figs. 74, 75 and 76.

Compare *Sciapus brevicornis* Macquart, which may be identical.

CHRYSOSOMA CHRYSURGUM Schiner.

Psilopus chrysurgum Schiner, Nov. Reise Dipt., 1868, 214.—*Chrysosoma chrysurgum* Becker, Cap. Zool., i. (4), 1922, 172.

CHRYSOSOMA INTERRUPTUM Becker.

Chrysosoma interruptum Becker, Cap. Zool., i. (4), 1922, 177; fig. 143.

CHRYSOSOMA CINGULIPES Walker.

Psilopus cingulipes Walker, Ent. Mag., ii., 1835, 472.—? *Psilopus grandis* Macquart, Dipt. Exot., suppl. 4, 1849, 126.—*Psilopus eximius* Walker, Ins.

Saund. Dipt., i., 1852, 209.—*Chrysosoma alatrum* Becker, Cap. Zool., i. (4), 1922, 188; fig. 159.

This is the only species of the genus recognised by me, being represented by a single male from Sydney, dated October 5, 1919. Apparently Walker described it in 1855, and again seventeen years later, whilst Macquart's description seems to conform to the same.

There can be no doubt that Becker's name applies to the one here recognised.

Genus Sciapus Zeller.

Sciapus Zeller, Isis, xi., 1842, 831.—White, Proc. Roy. Soc. Tasm., 1916, 247.—*Sciopus* Becker, Cap. Zool., i. (4), 1922, 196, which see for synonymy.

The name *Sciapus* was used indiscriminately for all species of *Chrysosoma* and allies by White, who drew attention to the Australian forms as being not a homogeneous group. Many species were originally described under the genus *Psilopus*, and *Sciopus* is the name used by Becker. Two new forms are described below, both of which are to be secured in abundance in situations indicated under their descriptions.

Key to the Species of Sciapus.

1. Wings hyaline, unmarked. .. .. 2.

Wings with black or brown fascia. .. .. 4.

2. Third antennal segment yellow, long and triangular, length twice the width at its base, arista placed basally. .. .. *anomalicornis* Becker.

Third antennal segment black, short, about as long as wide, arista placed sub-apically. .. .. 3.

3. Wings of the male with a marginal kink at the apex of M2; a species of moderate size with abdomen metallic green and dark bands at incisions. .. .. * *anomalipennis n.sp.*

Wings of the male normal; very small species with yellow abdomen, but metallic towards the apex and with a dark line at incisions of the segments. .. .. * *triscuticatus n.sp.*

4. Fascia of the wings isolated not joined together at the costal margin. .. .. 5.

Fascia of the wings conspicuously joined together at costal margin by a more or less broad stripe. .. .. 6.

5. Small species (3—3.5 mm.) with fascia attaining the costal margin or almost so; cross-vein closing the median cell straight. .. .. * *discretifasciatus* Macq.

Large species (6—7 mm.) with the fascia restricted to the base of vein M1 and to the sinuous cross-vein closing the median cell. .. .. * *brevicornis* Macq.

6. Fascia of wings restricted to two cross-bands broadly joined at the costal margin, the strip uniting them reaches the lowest radial vein; base of M1 slightly recurrent, the cross-vein closing the median cell straight. .. .. * *connexus* Walker.

Fascia of wings containing two cross-brands narrowly joined by a strip that only reaches the middle radial vein; there is also a spot on the cubital vein and another infuscation at the apex of the first radial vein. .. .. * *ingenuus* Erich.

Sciapus anomalicornis Becker.

Sciopus anomalicornis Becker, Cap. Zool., i. (4), 1922, 199; figs. 172, 173.

Sciapus ingenius Erischon.

Psilopus ingenius Erischon, Arch. f. Nat., viii., 1842, 273.—*Psilopus trifasciatus* Macquart, Dipt. Exot., suppl. 4, 1849, 126; pl. xii., fig. 8.—*Sciapus* *trifasciatus* White, Proc. Roy. Soc. Tasm., 1916, 248.—*Chrysosoma trifasciatus* Becker, Cap. Zool., i. (4), 1922, 176.—*Sciopus plumifer* Becker, Cap. Zool., i. (4), 1922, 206; figs. 183, 184.

Habitat: Tasmania, Victoria and New South Wales. Very common from Hobart to the Blue Mountains, from December to March.

SCIAPUS CONNEXUS Walker.

Psilopus connexus Walker, Ent. Mag., ii., 1835, 471.—*Psilopus pachygyna* Macquart, Dipt. Exot., suppl. 3, 1848, 37; pl. iv., fig. 1; and suppl. 4, 1849, 128.—Schiner, Nov. Res. Dipt., 1868, 212.—*Sciapus pachygyna* Bergoth, Stett. Ent. Zeit., lv., 1894, 72.—*Sciopus pachygyna* Becker, Cap. Zool., i. (4), 1922, 209; figs. 192, 193.

Habitat: New South Wales and Queensland. Very common, specially so in banana plantations, and is to be found most months of the year, becoming very scarce in mid-winter.

SCIAPUS DISCRETIFASCIATUS Macquart.

Psilopus discretifasciatus Macquart, Dipt. Exot., suppl. 4, 1849, 127; pl. xii., fig. 9.—*Sciapus discretifasciatus* White, Proc. Roy. Soc. Tasmania, 1916, 250.—*Sciopus depinctus* Becker, Cap. Zool., i. (4), 1922, 210; figs. 196, 197.

Habitat: New South Wales. Common in Sydney during November. Not known to occur in Tasmania, which is Macquart's locality.

SCIAPUS BREVICORNIS Macquart.

Psilopus brevicornis Macquart, Dipt. Exot., suppl. 4, 1849, 124; pl. xii., fig. 4.—*Sciapus brevicornis* White, Proc. Roy. Soc. Tasmania, 1916, 249.

The figures given by Becker for *Chrysoma volucre* equally apply to this species, so if Becker has made an error in antennal structure, his species would need to be removed to this position.

Habitat: Tasmania. Not uncommon during December and January. The identification is based on the description given by White rather than that by Macquart.

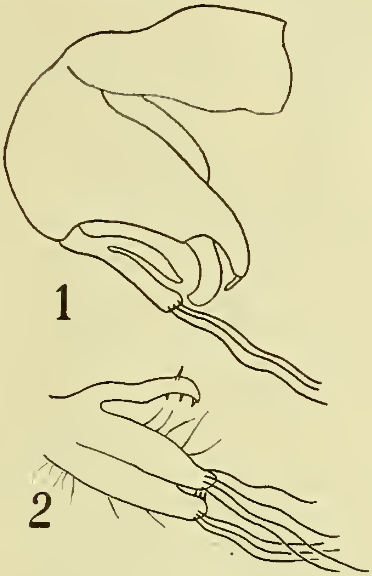
SCIAPUS ANOMALIPENNIS *n.sp.* (Text figs. 1 and 2).

♀. Metallic green, reddish in parts, and slightly white dusted. Antennae with the basal segments yellow, the third black. Proboscis and palpi yellow with black bristles. Hair behind head white. Thorax green above, bluish below. Abdomen green with black incisions; segments 5 to 7 somewhat coppery; hairs white. Genitalia black with white lamellae; bristles and hairs black. The lamellae are bifid, the larger branch of each terminates in three or four elongate sinuous black sub-apical bristles; there are short, black, spine-like bristles at the apex of the larger branch, and a few more scattered on the smaller branch of each lamella; also there are medium sized lateral bristles on the main structure. Coxae bluish; femora tibiae and tarsi yellow. Wings hyaline with a large kink in the border at the second median vein where a chitinous spot occurs, otherwise the venation is normal, yellow to brown in colour; halteres yellow.

The female is similar, but normal in the shape of the wing. The abdomen has only five visible segments. The reddish colour may extend over practically the whole of the female.

Length: 5—6 mm.

Habitat: Queensland, Brisbane. This is one of the most abundant forms in the bush, where it may be found running in numbers up and down the trunks of *Eucalyptus micrantha* (Scribbly Gum). The dates range from September to January, but specimens are to be found during most months of the year. The type series is a very extensive one, thirty being in my own collection, including the holotype and allotype. There is a long series of paratypes in the Queensland Museum.



Genitalia of *Sciapus anomalipennis n.sp.*

1. Male lateral view.
2. The lamella of same, seen from a more ventral angle.

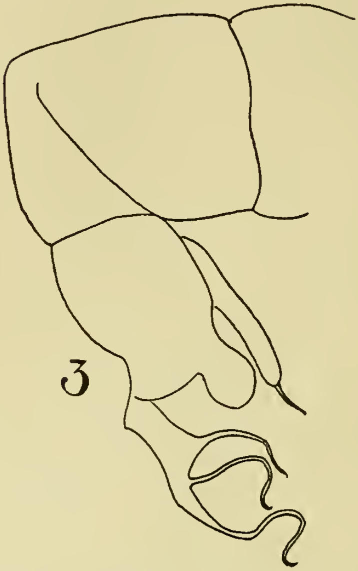
SCIAPUS TRISCUTICATUS *n.sp.*

♀. Head, thorax, scutellum and coxae metallic blue-green, elsewhere mainly yellow. Antennae and proboscis yellow, bristles black, hair white. Abdomen with first segment in part, metallic green, as also the apex of the fourth and whole of the fifth; apex of the second to third fuscous. The genitalia are yellow and each of the two lamellae are provided with three whip-like filaments, one at the apex and two on the outer border.

The female is similar, but the abdomen has only four visible segments, all yellow and margined with metallic green, which colour spreads on to the dorsum of the two last segments. Also the anterior and posterior coxae are yellow.

Length: 3—4 mm.

Habitat: Queensland, Brisbane. This is the species that is most persistently to be found in buildings on windows. It is also to be taken along hedges in gardens, but the majority of the type series were collected in the former position. It occurs from October to June, but is probably to be met with during other months. New South Wales: Sydney, 1 female, February, **1920.**



Genitalia of *Sciapus triscuticatus n.sp.*
3. Male lateral view.

Genus CONDYLOSTYLUS Bigot.

Condylostylus Bigot, Ann. Soc. Ent. France (3), vii., 1859, 223.—Becker, Cap. Zool., i. (4), 1922, 216.

Judging from original and subsequent descriptions, I can detect four species hitherto named, that come within this group. There are about ten species before me, but it is somewhat difficult to ally the sexes. The males of three are provided with hook-shaped cilia along the costal margin of the wing, but this is not seen by me on any female. Only two species are definitely recognised by a name.

Key to the Species of Condylostylus.

1. Costal margin of the wing with long hook-shaped cilia. Males. .. .. 2.
   Costal margin of wing without such cilia. .. .. 4.
2. Antennae with long stiff black bristles which are very conspicuous, forming a whorl. Legs entirely black. .. .. 3.
   Antennae with less conspicuous bristles which are short. Tibiae yellow. .. .. * *sp.*
3. With only a few long black bristles on or near the humeral angle of the thorax. .. .. * *amoenus* Becker.
   With numerous long black bristles at or near the humeral angle of the thorax. .. .. * *nigropilosus* Macquart.
4. Legs entirely black, anterior tibiae with short white hair below; with two protuberances towards the apex of the femora and another near the base of tibiae. Wings with vein M1 recurrent at base.

Male and female. .. .. *australiensis* Schiner.
Anterior tibiae at apex broadly yellow; vein M1 branching at right angles, not recurrent at base. Female. .. .. *viduus* Schiner.

CONDYLOSTYLUS AMOENUS Becker.

Condylostylus amoenus Becker, Cap. Zool., i. (4), 1922, 219; fig. 203.

There are three forms that agree with the character of having hook-shaped cilia along the costa of the wing, as illustrated by Becker. A male before me is from Como, New South Wales, October, 1921, and a female that probably belongs to the same species is from Sydney, December, 1918. They are referable to Becker's species, and the costal cilia seems to be limited to the male.

CONDYLOSTYLUS NIGROPILOSUS Macquart.

Psilopus nigropilosus Macquart, Dipt. Exot., suppl. 2, 1847, 56.—*Sciapus nigropilosus* White, Proc. Roy. Soc. Tasmania, 1916, 251.

Only a single specimen is before me, from Tasmania, Hobart, October, 1916; and would seem to agree with White's interpretation of Macquart's species.

CONDYLOSTYLUS AUSTRALIENSIS Schiner.

Psilopus australiensis Schiner, Nov. Reise. Dipt., 1868, 216.—*Condylostylus australiensis* Becker, Cap. Zool., i. (4), 1922, 219; fig. 202.

CONDYLOSTYLUS VIDUUS Schiner.

Psilopus viduus Schiner, Nov. Reise, Dipt., 1868, 216.—*Condylostylus viduus* Becker, Cap. Zool., i. (4), 1922, 220.

Genus MEGISTOSTYLUS Bigot.

Megistostylus Bigot, Ann. Soc. Ent., France (3), 1859, 222.—Becker, Cap. Zool., i. (4), 1922, 220.

MEGISTOSTYLUS LONGICORNIS Fabr.

Musca longicornis Fabricius, Syst. Ent., 1775, 783.—*Dolichopus crinicornis* Wiedemann, Analecta Entom., 1824, 39.—*Megistostylus longicornis* Becker, Cap. Zool., i. (4), 1922, 230; and as *Megistostylus crinicornis* on fig. 216.

CHRYSOSOMATINAE *of Uncertain Generic Position.*

Psilopus angulosus Bigot, Ann. Ent. Soc. France (6), x., 1890, 285.

Sciapus chalceus White, Proc. Roy. Soc. Tasmania, 1916, 250.

Psilopus dispar Macquart, Dipt. Exot., suppl. 4, 1849, 125; pl. xii., fig. 5.—*Sciapus dispar* White, Proc. Roy. Soc. Tasmania, 1916, 251. (? *Condylostylus*).

Psilopus gemmans Walker, List. Dipt. Brit. Mus., iii., 1849, 644. (? *Condylostylus*).

Psilopus nigrofasciatus Macquart, Dipt. Exot., suppl. 4, 1849, 126; pl. xiv., fig. 6. (? *Condylostylus*).

Psilopus sydneyensis Macquart, Dipt. Exot., suppl. 1, 1846, 55; pl. xi., fig. 16; and suppl. 2, 1847, 56.—White, Proc. Roy. Soc. Tasmania, 1916, 251.

Psilopus sublectus Walker, Ins. Saund. Dipt., i., 1852, 211.

Psilopus tricolor Walker, Ent. Mag., ii., 1835, 471. (? *Condylostylus*).

Psilopus venustus Walker, Ins. Saund. Dipt., i., 1852, 209.—(Compare this West Australian species with *Chrysosoma volucre* Becker).

CHRYSOSOMATINAE *erroneously included as Australian.*

Psilopus conicornis Macquart, Dipt. Exot., suppl. 1, 1846, 248.—This species was described as from Pondichery and l'isle Sidney. The latter locality is associated with several Australian species by Macquart, and many of those forms are regarded as being from Sydney, New South Wales. This can scarcely apply to the present species, because Becker has recognised it as being *Chrysosoma leucopogon* Wiedemann, known to occur from India to Formosa, and is not known from Australia.

Note: Since this catalogue was completed, a recent paper containing descriptions of Australian Dolichopodidae has come to hand, namely, that of O. Parent, in Mitteilung Zool. Mus., Hamburg, xliii., 1928, pp. 190-198. Three species are recorded there from the Commonwealth, none of which I have been able to identify.

p. 197. *Chrysosoma diversicolor* Parent, from Queensland, is based on a male and is said to be easily recognised by the abnormal coloration of the femora; the anterior ones are yellow, the others black.

p. 191. *Sciopus proximus* Parent, from New South Wales, has the wing pattern and venation of *S. connexus*, but the genitalia are like those of *S. ingenuus*, only the lamellae are somewhat triangular and very short, just of such a shape as might be expected on a specimen of *ingenuus* if the lamellae were to be broken near the base.

p. 193. *Sciopus sordidus* Parent, from New South Wales, is based on a female whose characters agree in the main with that described above as *S. anomalipennis;* it differs in two or three respects, however, the chief is in the venation which has the "Transverse postérieure légèrement en S, un peu oblique."

Sub-family CAMPSICNEMINAE.

Genus SYMPYCNUS Loew.

Sympycnus Becker, Cap. Zool., i. (4), 1922, 93.

Many species belong here, and one of them from Southern Queensland, is closely related to *S. praecipuus* Becker, from New Guinea.

SYMPYCNUS ANOMALIPENNIS Becker.

Sympycnus anomalipennis Becker, Cap. Zool., i. (4), 1922, 103; fig. 62.

Habitat: New South Wales: Sydney, June, 1917. Queensland: Brisbane, November, 1927, and June, 1929. These three specimens are apparently all males, and one of them was taken when sweeping grass beside a hedge of *Duranta*.

Sub-family HYDROPHORINAE.

Genus HYDROPHORUS Fallen.

Hydrophorus Becker, Cap. Zool., i. (4), 1922, 40.

There are two species, one from near Sydney, the other from Hobart, but neither of them fits Macquart's description. I searched for this genus for several years before finding it, and then took a small series at Como, New South Wales, in 1921, and another series at a water hole near Hobart, situated between the summit of Mount Nelson and the fort near-by; January, 1924. I saw it again flying on the water troughs in the Sydney Botanical Gardens, in April, 1928. The species are very difficult to catch.

Genus PARALIPTUS Bezzi.

Paraliptus Bezzi, Austr. Zool., iii., 1923, 179.

PARALIPTUS MIRABILIS Bezzi.

Paraliptus mirabilis Bezzi, Austr. Zool., iii., 1923, 181.

Genus LIPAROMYIA White.

Liparomyia White, Proc. Roy. Soc. Tasmania, 1916, 256.

LIPAROMYIA SEDATA White.

Liparomyia sedata White, Proc. Roy. Soc. Tasmania, 1916, 256.

There is no assurance that this species belongs to the sub-family, and White gives no characters whereby it can be placed, but it is described with uniserial acrostichals.

Species of Uncertain Generic Position.

Hydrophorus cupreus Macquart, Dipt. Exot., suppl. 4, 1849, 123.—White, Proc. Roy. Soc. Tasmania, 1916, 258.

Sub-family RAPHIINAE.

Genus SYNTORMON Loew.

Syntormon Becker, Cap. Zool., i. (4), 1922, 55.

SYNTORMON AEMULANS Becker.

Syntormon aemulans Becker, Cap. Zool., i. (4), 1922, 57.

Sub-family DIAPHORINAE.

This appears to be a large group in Australia that needs very careful consideration. A revision of the described forms is urgently needed, but there are no named specimens in Australian collections that will aid in the work, and some years must pass before sufficient material from the type localities has accumulated. Three species are before me.

Genus DIAPHORUS Meigen.

Diaphorus White, Proc. Roy. Soc. Tasmania, 1916, 253.—Becker, Cap. Zool., i. (4), 1922, 66.

DIAPHORUS INTACTUS Becker.

Diaphorus intactus Becker, Cap. Zool., i. (4), 1922, 73.

DIAPHORUS UNICOLOR Becker.

Diaphorus unicolor Becker, Cap. Zool., i. (4), 1922, 75.

DIAPHORUS SETOSUS White.

Diaphorus setosus White, Proc. Roy. Soc. Tasmania, 1916, 254.

DIAPHORUS COMMUNIS White.

Diaphorus communis White, Proc. Roy. Soc. Tasmania, 1916, 255.

DIAPHORUS MINOR Meigen.

Diaphorus minor Becker, Cap. Zool., i. (4), 1922, 77.

Genus CHRYSOTUS Meigen.

Chrysotus Becker, Cap. Zool., i. (4), 1922, 86.

CHRYSOTUS ADSIDUUS Becker.

Chrysotus adsiduus Becker, Cap. Zool., i. (4), 1922, 89.

Sub-family DOLICHOPODIDAE.

Genus DOLICHOPUS Latrielle.

Dolichopus Becker, Cap. Zool., i. (4), 1922, 6.

I believe I am correct in placing one species from Brisbane in this genus, which seems to have been recorded from New Guinea and Aru Island, although Becker only recognised it from considerably north of these islands.

Genus PARACLIUS Bigot.

Paraclius Becker, Cap. Zool., i. (4), 1922, 11.

There are two species of this genus from Brisbane—seven specimens of one, and eight of the other. I am unable to identify Becker's species in either of them.

PARACLIUS NEGLECTUS Becker.

Paraclius neglectus Becker, Cap. Zool., i. (4), 1922, 16.

Sub-family MEDETERINAE.

Genus MEDETERA Fischer.

Medetera Becker, Cap. Zool., i. (4), 1922, 48.

There are several species from Queensland and Tasmania that seem to belong here.

MEDETERA EXTRANEA Becker.

Medetera extranea Becker, Cap. Zool., i. (4), 1922, 49.

Genus THYPTICUS Gerstaecker.

Thypticus Becker, Cap. Zool., i. (4), 1922, 54.

This genus is also represented from Queensland and Tasmania.

THYPTICUS ABDITUS Becker.

Thypticus abditus Becker, Cap. Zool., i. (4), 1922, 54.

Sub-family NEUROGONINAE.

Genus NEUROGONA Rond.

Neurogona Becker, Cap. Zool., i. (4), 1922. 61.

NEUROGONA DENUDA Becker.

Neurogona denuda Becker, Cap. Zool., i. (4), 1922. 62; fig. 44.

Specimens from Brisbane are evidently this species which is recorded from Kuranda (Queensland), Formosa, India and Assam.

Genus ARCHYNOMYIA White.

Archynomyia White. Proc. Roy. Soc. Tasmania. 1916, 252.

There are two species represented from Tasmania, and one from the National Park, Queensland. It would seem to form quite a valid genus.

ARCHYNOMYIA ARGORUM White.

Archynomyia arborum White, Proc. Roy. Soc. Tasmania. 1916, 253.—*Archynomyia cupreus* Hardy. Proc. Linn. Soc. N.S. Wales, xlvi., 1921, 300.

I do not think my previous suggestion that *Hydrophorus cupreus* Macquart, may be this species, will be maintained. Macquart's specimens are more likely to be from Sydney, not Tasmania as recorded, and also *Hydrophorus* has subsequently been discovered, together with a complex of species that may belong to the same sub-family, but none of which conform to the three genera already placed there.

Habitat: Tasmania, Hobart, Wedge Bay, Triabunna and Dunalley. January to March, 1915, 1917 and 1918. One male, 3 females.